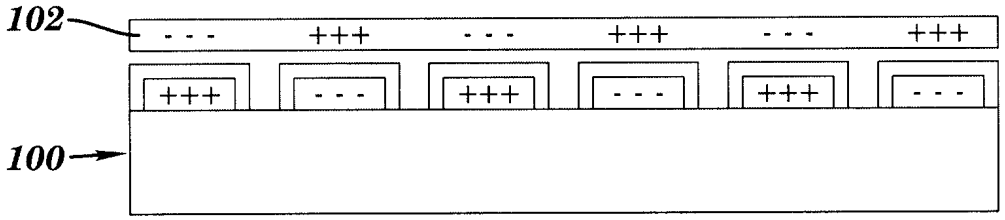

FIG. 1
PRIOR ART

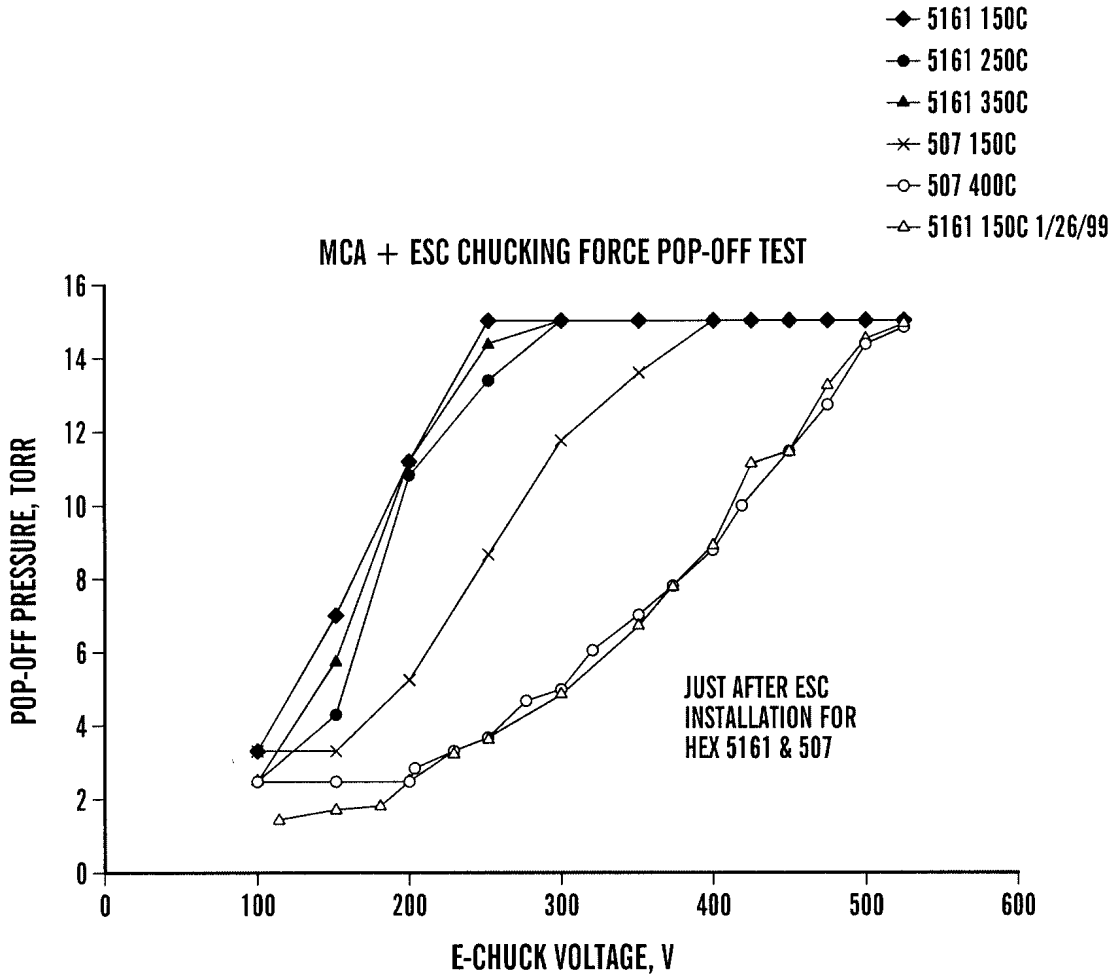

FIG. 2

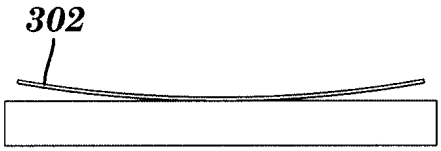

FIG. 3(a)

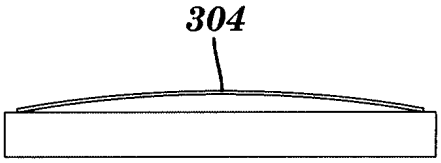

FIG. 3(b)

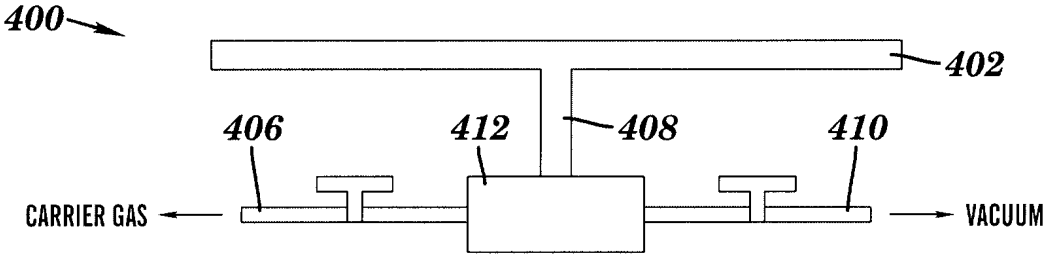

FIG. 4(a)

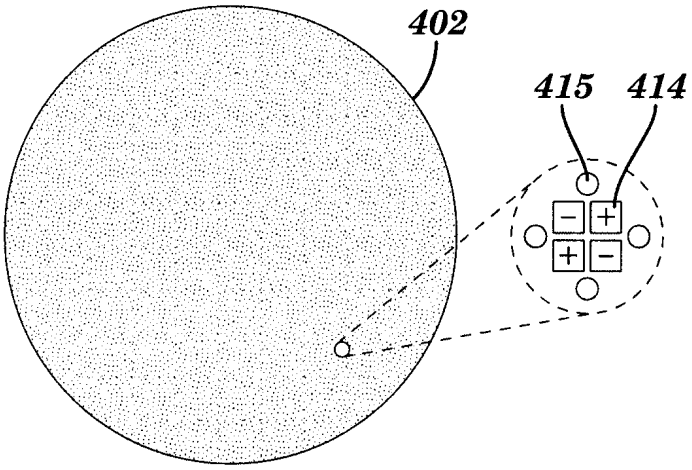

FIG. 4(b)

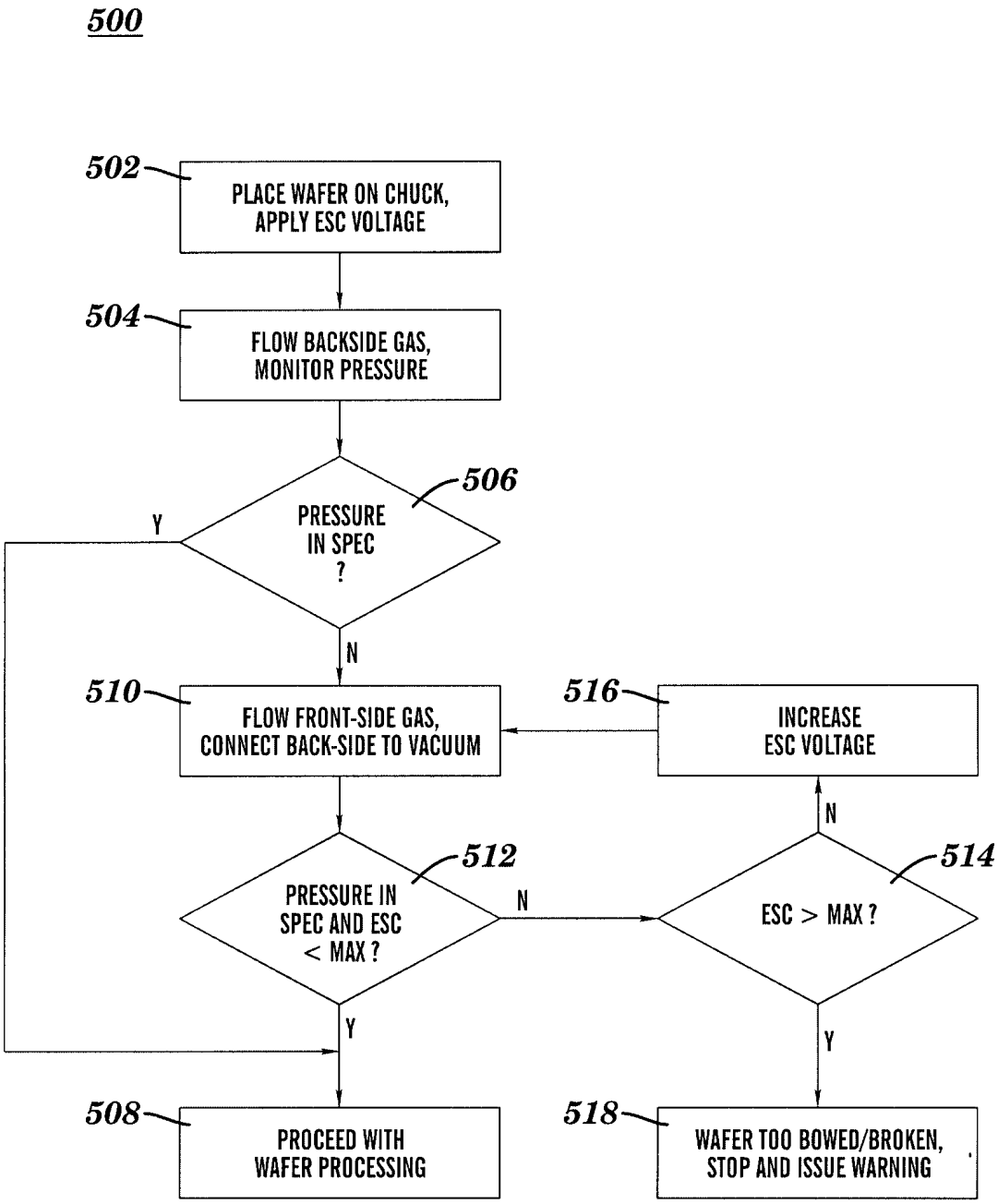
500
502
PLACE WAFER ON CHUCK, APPLY ESC VOLTAGE
504
FLOW BACKSIDE GAS, MONITOR PRESSURE
506
PRESSURE IN SPEC ?
Y
N
510
FLOW FRONT-SIDE GAS, CONNECT BACK-SIDE TO VACUUM
516
INCREASE ESC VOLTAGE
N
512
PRESSURE IN SPEC AND ESC < MAX ?
N
514
ESC > MAX ?
Y
Y
508
PROCEED WITH WAFER PROCESSING
518
WAFER TOO BOWED/BROKEN, STOP AND ISSUE WARNING

FIG. 5

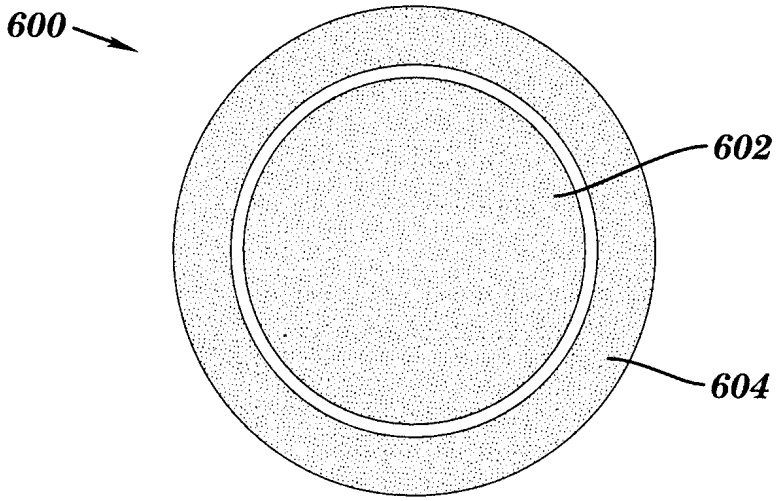
600
602
604

FIG. 6

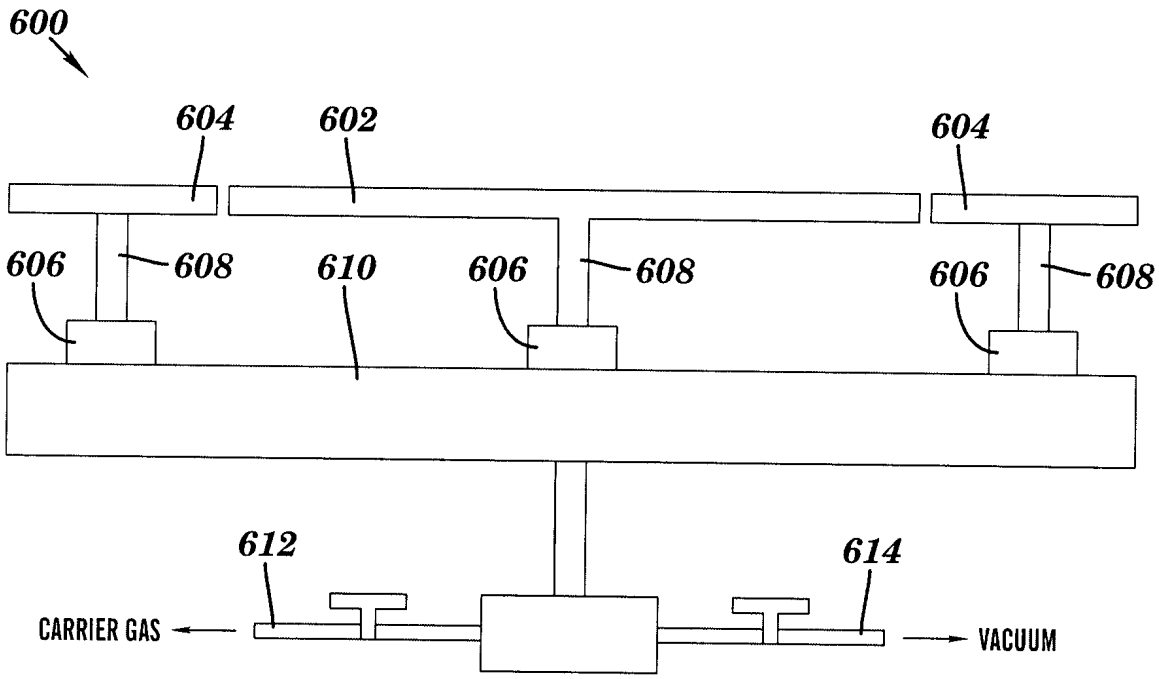
600
604
602
604
606
608
610
606
608
606
608
612
614
CARRIER GAS
VACUUM

FIG. 7

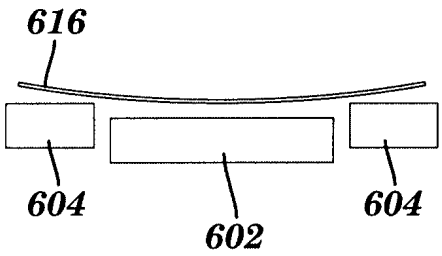

FIG. 8(a)

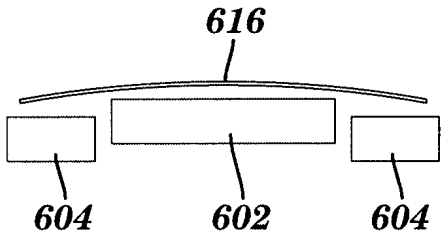

FIG. 8(b)